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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,713	04/19/2007	Yoshihito Ohkawa	1000023-000114	3547
21839 7590 02/26/2010 BUCHANAN, INGERSOLL & ROONEY PC POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			EXAMINER LEE, DORIS L	
			ART UNIT 1796	PAPER NUMBER
			NOTIFICATION DATE 02/26/2010	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/587,713	Applicant(s) OHKAWA, YOSHIHITO	
	Examiner Doris L. Lee	Art Unit 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-8 and 15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4-8 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The new grounds of rejection set forth below are necessitated by applicant's amendment filed on January 25, 2010. In particular, claim 1 to remove the zinc stannate and the calcium zinc molybdate from the limitations. As the previous rejection was properly rejection rejected on one (or more) embodiment(s), the applicant's cancellation of the rejected embodiment presents new issues with respect to the other embodiments that were not searched and examined. Thus, the following action is properly made final.
2. All outstanding objections and rejections, except for those maintained below, are withdrawn in light of applicant's amendment filed on January 25, 2010.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior office action.

Claim Rejections - 35 USC § 103

4. **Claims 1, 6 and 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Horacek et al (US 6,031,031)**.

Regarding claim 1, Horacek teaches a flame retardant polyamide composition (Abstract) which comprises:

Polyamide (col. 2, lines 1-22)

10 to 60 wt % glass fibers (col. 1, lines 30-35)

10 to 40 wt % melamin or melem phosphoric acid flame retardants (col. 2, lines 45-50)

Art Unit: 1796

And further flame retardants such as zinc borate and zinc phosphate (col. 3, lines 20-22) which are generally used in the amount 5% (Table 1)

Given these ranges, the amount of polyamide is present in an amount 75 % wt or less. It is noted that a mixture of the co-flame retardants may be used (col. 3, lines 33-34). However, Horacek fails to teach that the zinc borate and zinc phosphate is used in a ratio from 1:0.1 to 1:5.

When faced with a mixture, one of ordinary skill in the art would be motivated by common sense to select a 1:1 ratio, a ratio that falls within the presently claimed amount, absent evidence of unexpected or surprising results. Case law holds that "[h]aving established that this knowledge was in the art, the examiner could then properly rely... on a conclusion of obviousness, 'from common knowledge and common sense of the person of ordinary skill in the art within any specific hint or suggestion in a particular reference.'" *In re Bozek*, 416 F.2d 1385, 1390, 163 USPQ 545, 549 (CCPA 1969).

Regarding claim 6, Horacek teaches that the composition can be made into a molded article (col. 3, lines 35-40).

Regarding claim 8, Horacek teaches that the composition has a burning class C-0 according to UL 94. Regarding the remaining properties, given that Horacek teaches all the components of composition, it is therefore inherent that the prior art composition has the desired properties as listed in the present claim since such properties are evidently dependent upon the nature of the composition used. Case law

Art Unit: 1796

holds that a material and its properties are inseparable. In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990)

5. **Claims 4-5** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Horacek et al (US 6,031,031)** in view of **Sakai et al (US 5,183,843)**.

The discussion regarding Horacek in paragraph 4 above is incorporated here by reference.

Regarding claims 4-5, Horacek teaches that a polyamide material is to be used (Abstract), but fails to teach the presently claimed polyamide.

Sakai teaches a polyamide which is made from 70 mol % terephthalic acid, 30 mol % of isophthalic acid and 100 mol % of 1,6 diaminohehexane with a melting point of 325 C and an intrinsic viscosity of 1.0 g/dl (col. 6, lines 50-60).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to use the polyamide of Sakai as the polyamide of Horacek. One would have been motivated to do so in order to receive the expected benefit of using a polyamide with great fluidity and mold-releasing properties as well as high heat resistance and rigidity (Sakai, col. 2, lines 15-20). They are combinable because they are concerned with the same field of endeavor, namely polyamides.

6. **Claim 7** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Horacek et al (US 6,031,031)** in view of **Cosstick et al (US 6,166,114)**.

Art Unit: 1796

The discussion regarding Horacek in paragraph 4 above is incorporated here by reference.

Regarding claim 7, Horacek teaches that the composition can be molded into shaped articles for the electrical or electronics industry (col. 4, lines 10-12), however, fails to teach that the shaped article is a connector,

Cosstick teaches a flame-retardant polyamide composition (Abstract) which as a V-O UL-94 rating (col. 3, lines 47) can be molded into electrical components such as a connector (col. 6, line 13).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to mold the composition of Horacek into the shape of a connector as taught by Cosstick. One would have been motivated to do so in order to receive the expected benefit of using the composition in an appropriate electrical application. They are combinable because they are concerned with the same field of endeavor, namely molded flame retardant polyamide compositions.

7. **Claim 15** is rejected under 35 U.S.C. 103(a) as being unpatentable over **Horacek et al (US 6,031,031)** in view of **Jonas (US 3,516,959)**.

The discussion regarding Horacek in paragraph 4 above is incorporated here by reference.

Art Unit: 1796

Regarding claim 15, Horacek teaches that the composition contains 10 to 60 wt % glass fibers (col. 1, lines 30-35) and also teaches that the composition is open to the addition of customary additives (col. 3, line 24), however fails to teach the use of a drip preventing agent.

Jonas teaches the addition of less than 10% by weight (col. 1, line 48-50) of an anti drip agent (col. 1, lines 44-60) to a polymer such as nylon (col. 1, line 20).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to use the amount of anti-drip agent as taught by Jonas as the additive of Horacek. One would have been motivated to do so in order to reduce the dripping of the hot polymer onto surfaces which may burn (Jonas, col. 1, line 35-45). They are combinable because they are concerned with the same field of endeavor, namely flame retardant polymer compositions.

Response to Arguments

8. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Doris L. Lee whose telephone number is (571)270-3872. The examiner can normally be reached on Monday - Thursday 7:30 am to 5 pm and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571)272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1796

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Doris L Lee/
Examiner, Art Unit 1796

/Vasu Jagannathan/
Supervisory Patent Examiner, Art Unit 1796